

Solutia Inc.

702 Clydesdale Avenue Anniston, Alabama 36201-5328 *Tel* 256-231-8400

August 9, 2000

Mr. Wm. Gerald Hardy, Chief Hazardous Waste Branch Land Division Alabama Department of Environmental Management 1400 Coliseum Blvd. Montgomery, AL 36130-1463

Re: Revised Interim Measures Work Plan
Alabama D.O.T. Project No: STPAA-62(15)
State Route 21 From Cooper Lane to Existing 4-Lane at Oxford, Alabama

Dear Mr. Hardy:

Attached is a revised copy of the Interim Measures Plan (IMP) for the mitigation efforts to be constructed by Solutia at the site of the new bridge to be built on State Route 21 over Choccolocco Creek in Talladega County. Because the drawings which accompany the plan have not been revised, they are not included with the attachment.

The revised document includes the changes requested in your letter of July 27, 2000, which was received by Solutia on July 31, 2000. Specifically, the text of Section 5 has been revised to require that both filtered and unfiltered samples be analyzed for PCBs. If the daily downstream turbidity sample is at least one order of magnitude more turbid than the upstream sample, additional upstream and downstream water samples will be obtained and will be split. One portion of each of the splits will be filtered and the solid residue on the filters will be analyzed for PCBs. The other portions of the split samples will also be analyzed for PCBs, without filtration. All samples will be analyzed using the United States Environmental Protection Agency (USEPA) manual SW-846 Method 8082. It is noted that the standard reporting limit for total PCBs using this method is 67 ug/l, somewhat greater than the limit of 0.014 ug/l referenced in your letter. We are not aware of any routine analytical method which provides reporting limits as low as that number.

We believe that this revision addresses the only outstanding issue on the IMP and we look forward to receiving your approval of the plan. In the interim, we will be working with the Alabama Department of Transportation (ALDOT) to arrange a public meeting. In this context, it will be impossible to arrange such a meeting by the middle of August, as suggested in your letter. ALDOT requires a minimum 15 day notice period for public

meetings. Allowing for time to draft the notice and arrange for a suitable venue, it is unlikely that the meeting can be held before the first week of September. Because of the Labor Day holiday, it will more likely be held during the second week of September. Please let us know your availability to attend the meeting in that time frame.

Sincerely, Solutia Inc.

Craig R. Branchfield

Manager, Remedial Projects

cc:

Mr. Craig Brown, USEPA

Mr. Wesley Hardegree, USEPA

Mr. Russ McLean, USEPA

Ms. Karen Knight, USEPA, Anniston Office

Mr. B. E. Cox, ALDOT

RFI RESULTS AND INTERIM MEASURES PLAN
ALABAMA D.O.T.
PROJECT NO: STPAA-62(15)
ON S.R. 21 FROM COOPER LANE TO
EXISTNG 4-LANE AT OXFORD
TALLADEGA/CALHOUN COUNTIES

Prepared for

SOLUTIA INC. 702 Clydesdale Avenue Anniston, AL 36201

Second Revision August 9, 2000

URS Greiner Woodward Clyde

7600 West Tidwell, Suite 600 Houston, Texas 77040

1 Introduction

The Alabama Department of Transportation (ALDOT) is progressing with the planned expansion of Route 21 to incorporate a divided highway system. A section of the planned highway expansion from Cooper Lane to the existing 4-Lane at Oxford (Sheet No. 1 of the drawings) is scheduled to begin construction in June 2000.

Previous environmental studies have identified polychlorinated biphenyls (PCBs) in the sediments within the construction area. Solutia will perform several Interim Measures (IM) to address the affected sediment material prior to the commencement of ALDOT construction efforts. These include the following:

- Clearing and disposal of trees within the construction ROW;
- Excavating and segregating affected sediments from proposed bridge bents, in the utility corridor, and the drainage ditch;
- Managing excavated sediments; and
- Providing erosion and sediment controls in construction areas.

In the utility corridor and drainage ditch, affected sediments exhibiting concentrations exceeding 1 mg/kg but less than 50 mg/kg will be excavated and temporarily stockpiled along the proposed roadway embankment. Sediments having PCB concentrations greater than 50 mg/kg will be removed from the site and transported to a permitted Toxic Substances Control Act (TSCA) landfill, in accordance with the requirements of TSCA. Sediments in the Bridge Bent 4 area will only be excavated to remove concentrations above 50 mg/kg.

This document, together with the attached drawings, detail how the IM will be accomplished. The Corrective Measures Study (CMS), which was submitted on February 25, 2000, addresses the final disposition of affected sediments. Although the CMS considers the requirements of 40 CFR 761.61 for disposition of PCB remediation waste and, specifically, the requirements of 40 CFR 761.61 (a) (4) (i), it is understood that the selection and implementation of final corrective measures will be governed by the Resource Conservation and Recovery Act (RCRA) and, more specifically, under the requirements of Solutia's Alabama Hazardous Waste Management and Minimization Act (AHWMMA) permit.

2 Background Information

As part of the overall planning and design process, three field investigations were conducted in the Route 21 area adjacent to Choccolocco Creek. Sampling for these three investigations were concentrated in areas of anticipated excavation activities by ALDOT and relocation of utilities. The results were used in creating this IM Plan.

The sampling locations for these three investigations are shown on Sheet Nos. 2 and 3 of the drawings. The results of PCB analyses in soil are shown on Sheet Nos. 4 through 10 of the drawings. PCB-containing soils were generally encountered to depths in the range of 0 to 4 feet, and as deep as 6 feet in isolated areas. On the drawings, the PCB concentrations have been color coded to reflect values falling in one of three ranges: brown for concentrations exceeding 50 mg/kg, yellow for concentrations between 50 and 1 mg/kg, and green for concentrations less than 1 mg/kg. The number of samples having PCB concentrations falling in one of the three ranges is as follows:

- 28 samples contained PCB concentrations greater than 50 mg/kg,
- 192 samples contained PCB concentrations between 1 and 50 mg/kg, and
- 241 samples contained PCB concentrations less than 1 mg/kg.

3 Interim Measures Activities

As mentioned previously in Section 1.0, IM activities consist of clearing the construction area, removing and segregating affected sediments, managing affected sediments prior to ALDOT roadway construction work, and providing erosion and sediment controls in the construction areas. These activities are described in the following subsections.

3.1 Clearing

Trees will be cleared within the construction ROW by cutting at or near ground surface. As a result, grubbing will not be required. The trees will be reduced to chips that will be spread over an area within the ROW, but outside the proposed roadway embankment. The total area that requires clearing is approximately 6.2 acres, the limits of which are shown on Sheet No. 11 of the drawings.

3.2 Utility Corridor Excavation

The 4-inch gas and 20-inch water pipelines on the south side of Choccolocco Creek will be rerouted within a utility corridor. Affected sediments will be excavated in lifts as determined by sampling performed during the environmental investigation. The excavation will be performed along the centerline of the utility corridor using a surface width of 27 feet and 1H:1V sideslopes.

RFI Results and Interim Measures Plan Alabama D.O.T. Project No. STPAA-62(15) Highway 21 Bridge at Choccolocco Creek August 9, 2000 Revision 2

Excavation limits (horizontal and vertical) are listed on Table 1 provided on Sheet No. 12 of the drawings. Confirmation soil sampling will take place after initial excavation to verify that remaining soils from the floor of the excavation have PCB concentrations below the 1 mg/kg limit. Should confirmation sampling indicate PCB levels exceed 1 mg/kg, an additional one-foot will be excavated to a maximum of 6 feet below grade. Once excavation depths reach six feet, no more excavation will be performed and a geotextile fabric will be installed as a marker if excavation floor PCB levels are above 1 mg/kg. The details of the confirmation soil sampling program are described in Section 3.5.

Utility corridor excavation will be expanded, as shown on Sheet No. 12 of the drawings, to create a clean zone for two pipe jacking pits. These pits, one on each bank of Choccolocco Creek, will be 32 feet wide by 30 feet long. Pipe jacking pits will be excavated until confirmation sampling indicates PCB levels at or below 1 mg/kg. If either pipe jacking pit excavation reaches the total depth required by the utility companies for pipe jacking and PCB levels are above 1 mg/kg, an additional one foot of soil will be excavated and one foot of clean backfill will be added to create a clean work zone for pipe jacking.

3.3 Drainage Ditch Excavation

The drainage ditch located adjacent to the toe of the embankment near the creek has been found to contain affected sediments. Excavation will be performed along the centerline of the drainage ditch using a surface width of 27 feet and 2H:1V sideslopes. Excavation limits (horizontal and vertical) are listed on Table 2 provided on Sheet No. 13 of the drawings. Confirmation sampling will be performed using the same protocol as described in Sections 3.2 and 3.5. Total excavation depths will not exceed 4 feet below grade. In areas of the drainage ditch excavation where confirmation sampling of the 4 feet excavation indicate PCB levels above 1 mg/kg, a geotextile marker will be installed.

3.4 Bridge Bent Excavation

Sediment excavation will be performed in the footprint of the proposed Bridge Bent 4 as shown on Sheet No. 14 of the drawings. Excavation limits (horizontal and vertical) are listed on Table 3 provided on Sheet No. 14 of the drawings. Confirmation sampling will be performed to verify removal of sediments exhibiting PCB concentrations exceeding 50 mg/kg. Should confirmation sampling indicated PCB levels above 1 mg/kg, a geotextile marker will be installed.

3.5 Confirmation Sampling

Confirmation sampling will be carried out in the bottom of all excavated areas to document the residual concentrations of PCBs left in place. The sampling program will be consistent with the

RFI Results and Interim Measures Plan Alabama D.O.T. Project No. STPAA-62(15) Highway 21 Bridge at Choccolocco Creek August 9, 2000 Revision 2

requirements of 40 CFR 761 Subpart O in the areas where existing test results suggest that PCB concentrations could equal or exceed 50 mg/kg. Within these areas (between NERB-14 and NERB-23 in the utility corridor, between the creek and midway between NBCC-3 and NBCC-4 in the drainage ditch north of the creek, and in the excavation for Bent 4), samples will be obtained on a 5 foot (approximately 1.5 m) grid. The samples from two grid intervals along and transverse to the excavation (i. e., on a 10 foot grid) will be composited for PCB analyses.

Elsewhere within the excavated areas, samples will be obtained on transects spaced at 25 foot intervals. Three samples will be obtained along each transect (on the centerline and near the edges of the excavation) and these samples will be composited for PCB analyses. All PCB analyses for confirmatory purposes will be performed using gas chromatography.

4 Excavated Sediment Management

Soils excavated from the ditch (approximately 300 cubic yards [CY]) and the utility corridor (approximately 3,700 CY) with PCB concentrations greater than 1 mg/kg but less than 50 mg/kg will be placed in a temporary stockpile within the proposed roadway embankment. Excavated soil with PCB concentrations greater than 50 mg/kg will be segregated and disposed of off-site at an approved landfill (approximately 1,000 CY) in accordance with the requirements of TSCA.

The results of the existing investigations are sufficient to plan the excavation of those areas likely to contain soils with PCB concentrations equal to, or greater than, 50 mg/kg. However, additional testing will be required during the excavation to define the limits of these materials and to confirm that the excavated soil is being appropriately disposed of. That testing will be carried out using a combination of immunoassay screening (to provide preliminary results) and laboratory testing (to confirm the immunoassay screening). However, it is possible that a mobile laboratory equipped with a gas chromatograph will be established on site, in which case immunoassay screening will not be used.

Whichever method is used for field control, minimal on-site staging will occur. Soils containing PCBs at concentrations in excess of 50 mg/kg will be loaded directly into covered roll-off containers in a secure staging area. The container will remain on site only long enough to obtain laboratory confirmation of its contents and will then be transported to a TSCA-approved landfill for disposal.

Soils which contain PCBs at concentrations greater than 1 mg/kg, but less than 50 mg/kg, will be immediately transferred to the temporary stockpile location. The soils will be spread in layers and will be compacted to satisfy ALDOT's specifications for embankment fill. The temporary

RFI Results and Interim Measures Plan Alabama D.O.T. Project No. STPAA-62(15) Highway 21 Bridge at Choccolocco Creek August 9, 2000 Revision 2

stockpile(s) will be covered with a geotextile to prevent erosion and off-site migration. In addition, the stockpile(s) will be surrounded by silt fencing and, where necessary, straw bales.

5 Erosion and Sediment Controls

Erosion protection will be provided in construction areas (those having excavation or disturbed soils, approximately 7.0 acres). This protection includes coverage of all exposed soil areas with 6-ounce non-woven type geotextile. Sandbags will be used as temporary anchors to hold the geotextile in place until the exposed areas are covered and vegetated during bridge construction.

Control of sediment migration will be managed through the installation of silt fencing along the tributary, the drainage ditch on the north side of the creek, and on Choccolocco Creek adjacent to construction areas and the construction of a check dams in the tributary and the drainage ditch. The purpose of the silt fencing and the check dams is to minimize the movement of sediment from disturbed areas into surface water pathways.

In order to ensure that the erosion and sediment control measures are effective, an in-stream monitoring program will be implemented during construction. The turbidity of the water will be measured daily both upstream and downstream of the site while excavation is in progress. If the turbidity shows a significant increase in the downstream direction (at least one order of magnitude), additional upstream and downstream water samples will be collected. These samples will be split and one of the split portions from each sample will be filtered. The solid residue from the filtered samples will be analyzed for PCBs. The other portions of the split samples (i.e., the unfiltered or whole water portions) will be analyzed for both PCBs and total suspended solids content. Additional erosion control measures will also be constructed around the work site.

Erosion and sediment control features are shown on Sheet No. 15 of the drawings.

VICINITY MAP

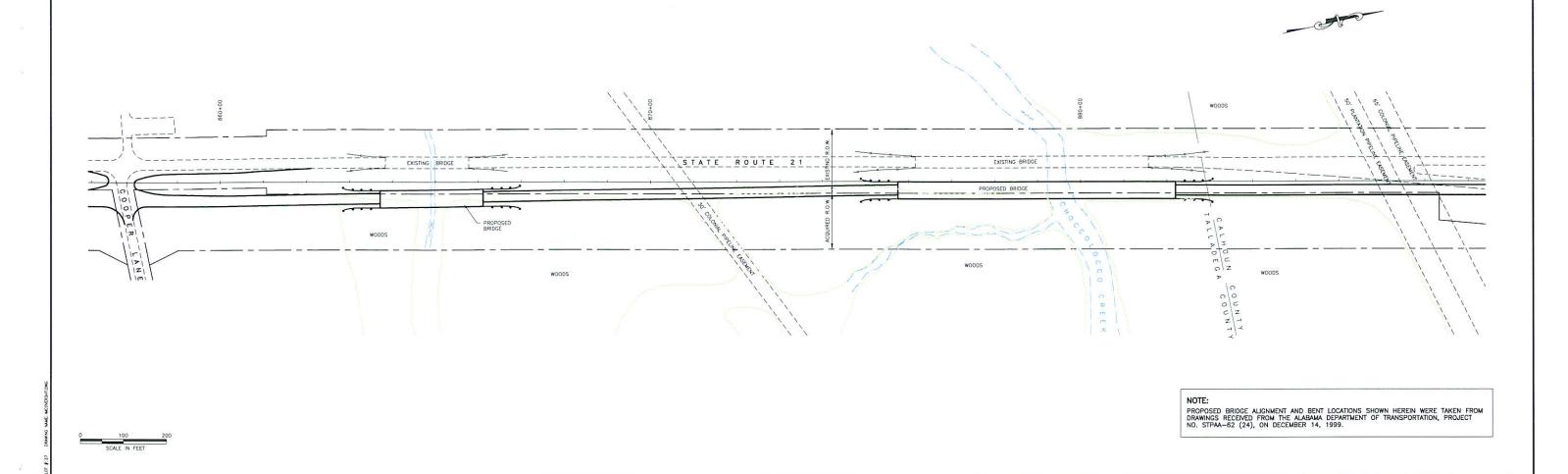
RFI RESULTS AND INTERIM MEASURES PLAN

ALABAMA DEPARTMENT OF TRANSPORTATION PROJECT NO. STPAA-62(15) ON S.R. 21 FROM COOPER LANE TO EXISTING 4-LANE AT OXFORD TALLADEGA/CALHOUN COUNTIES

CHOCCOLOCCO CREEK OXFORD, ALABAMA

SITE MAP

ROJECT 460097T143

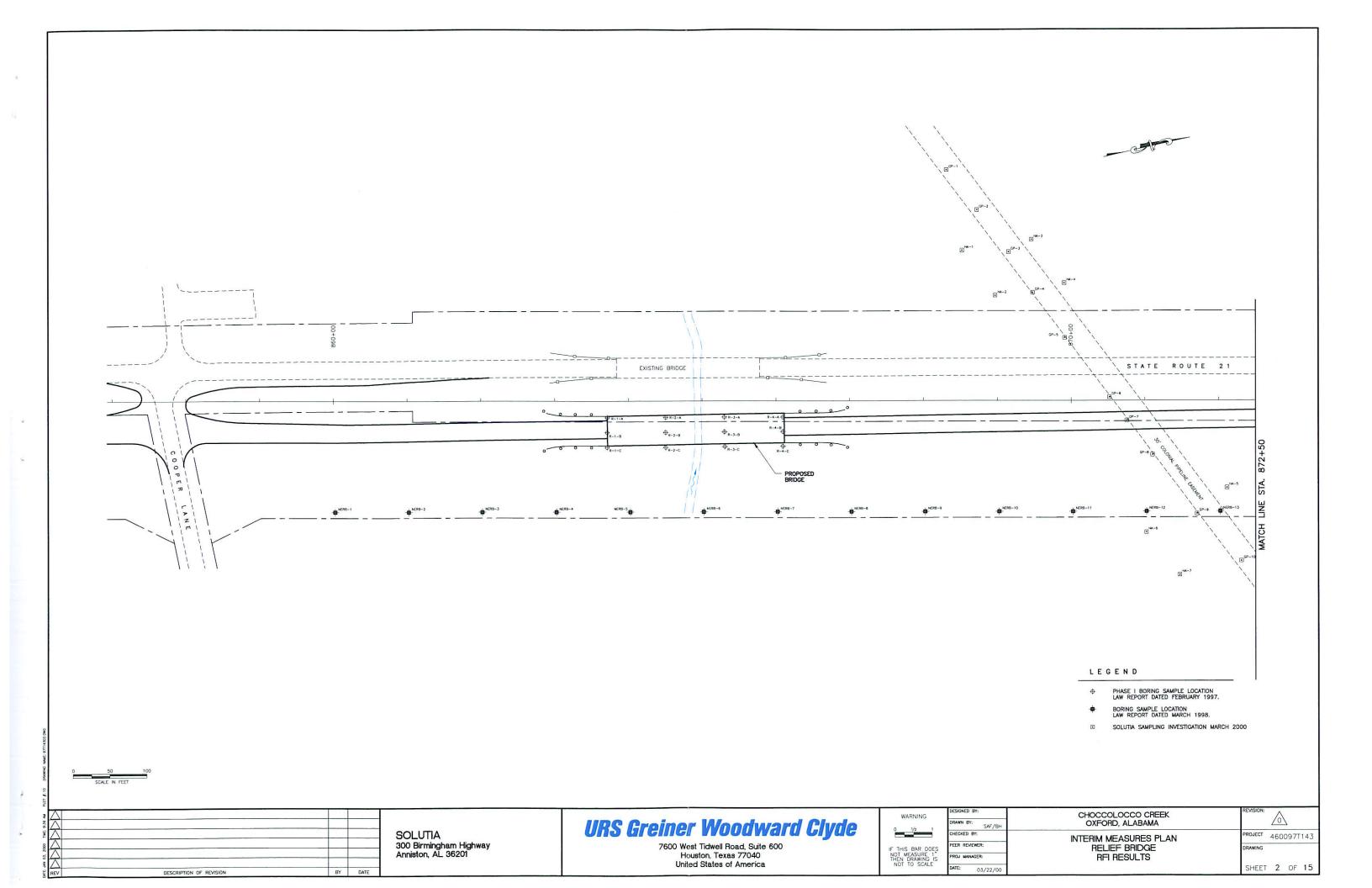


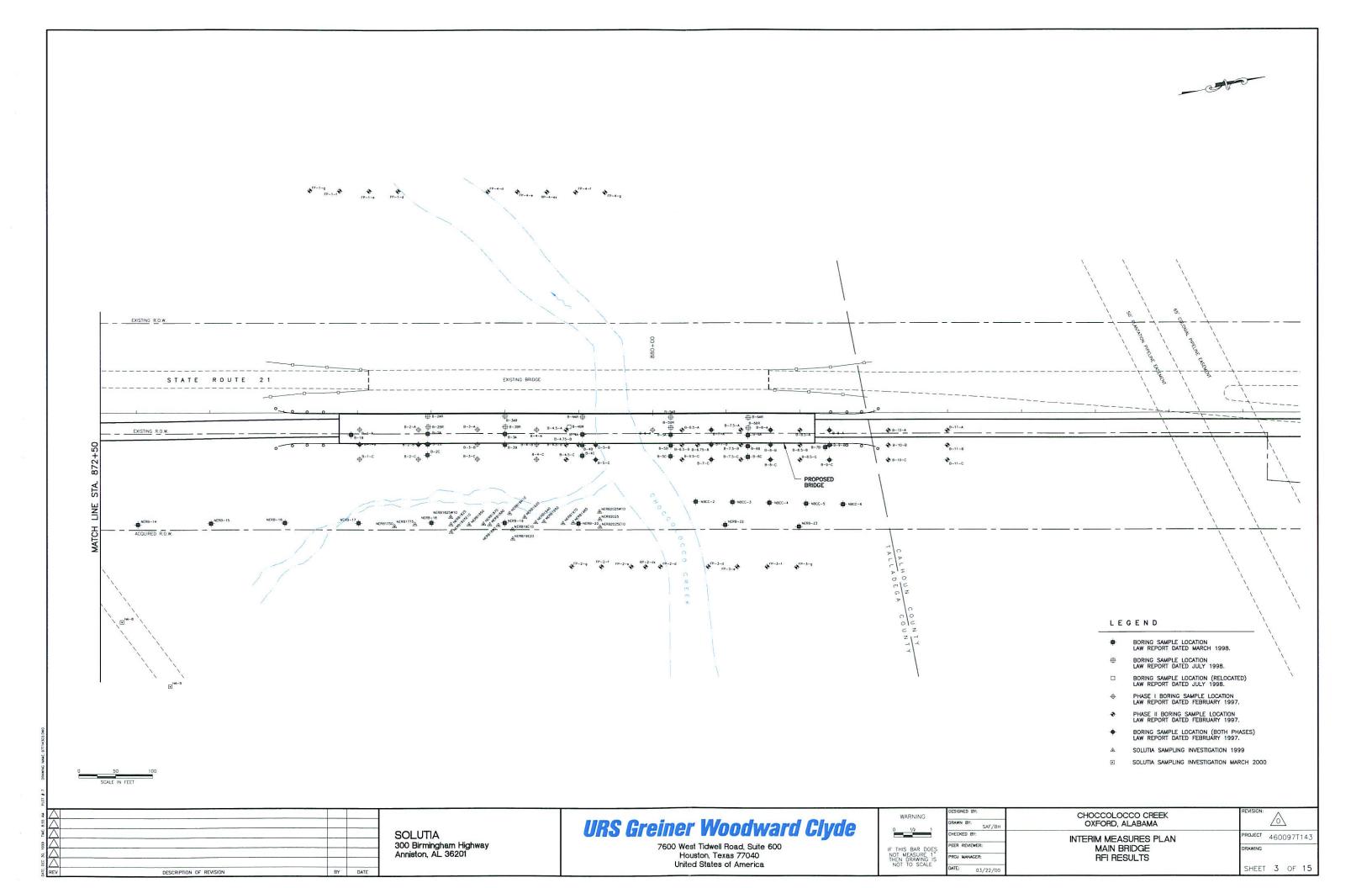
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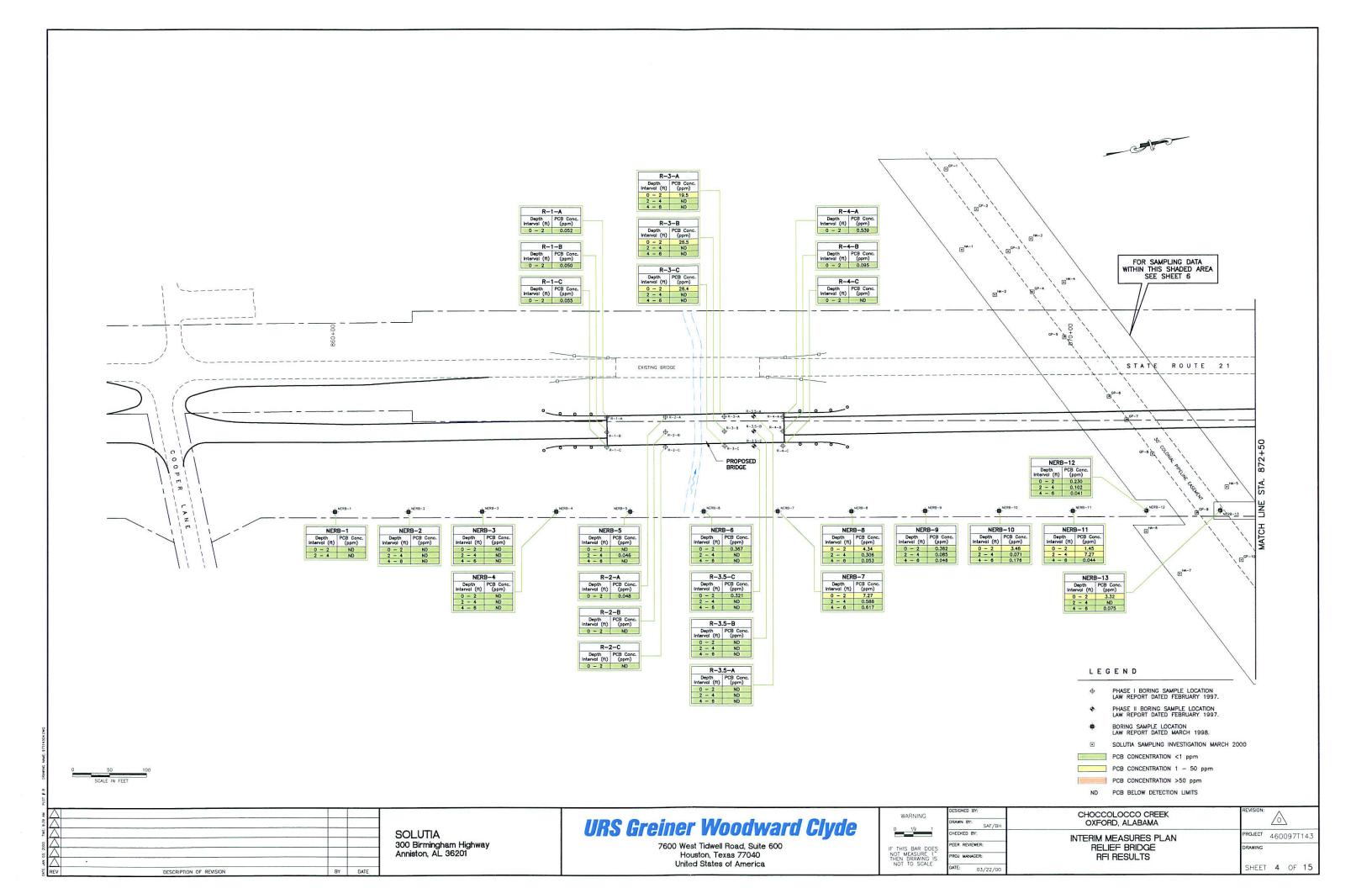
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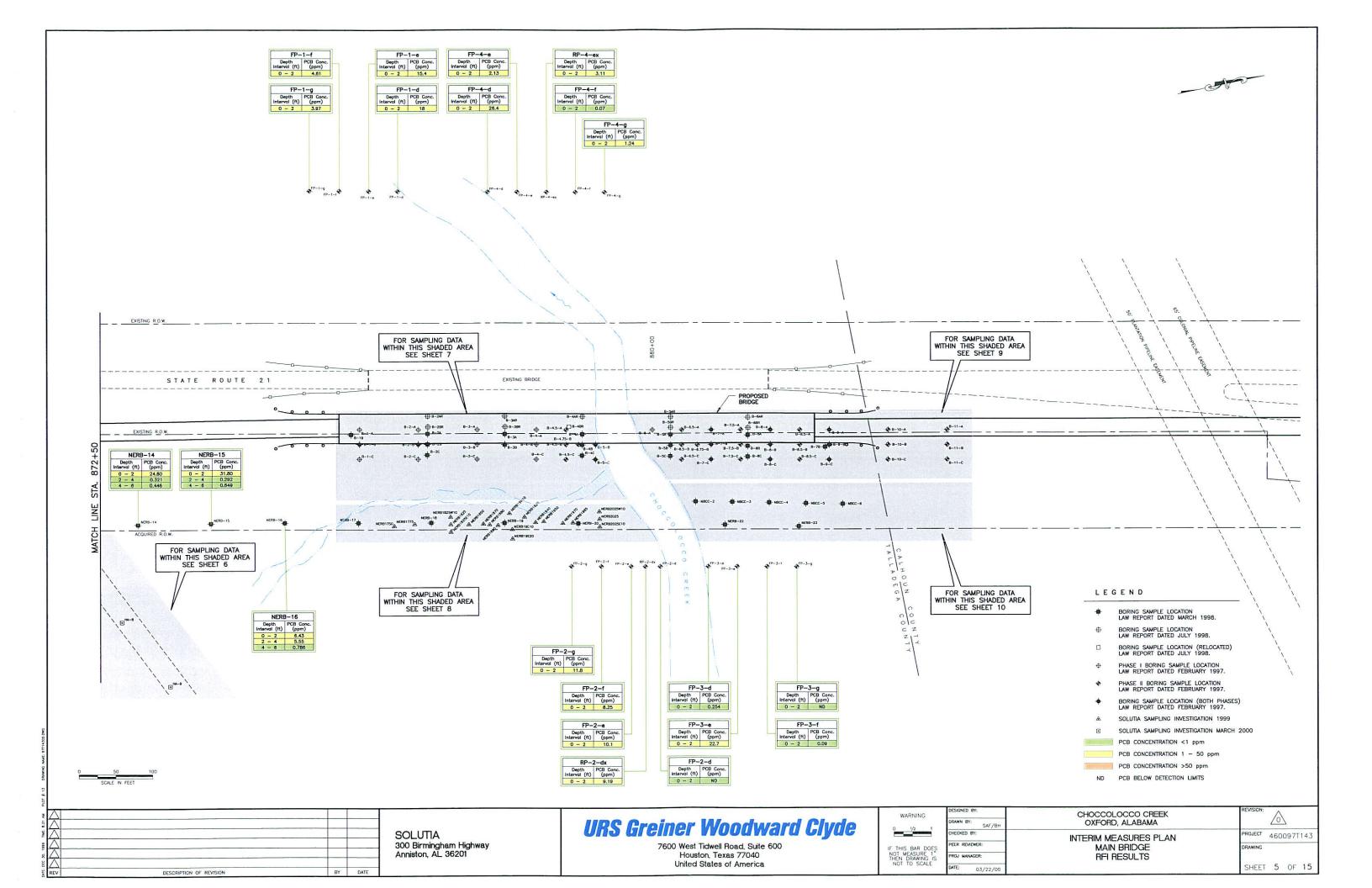
Houston, Texas 77040 United States of America

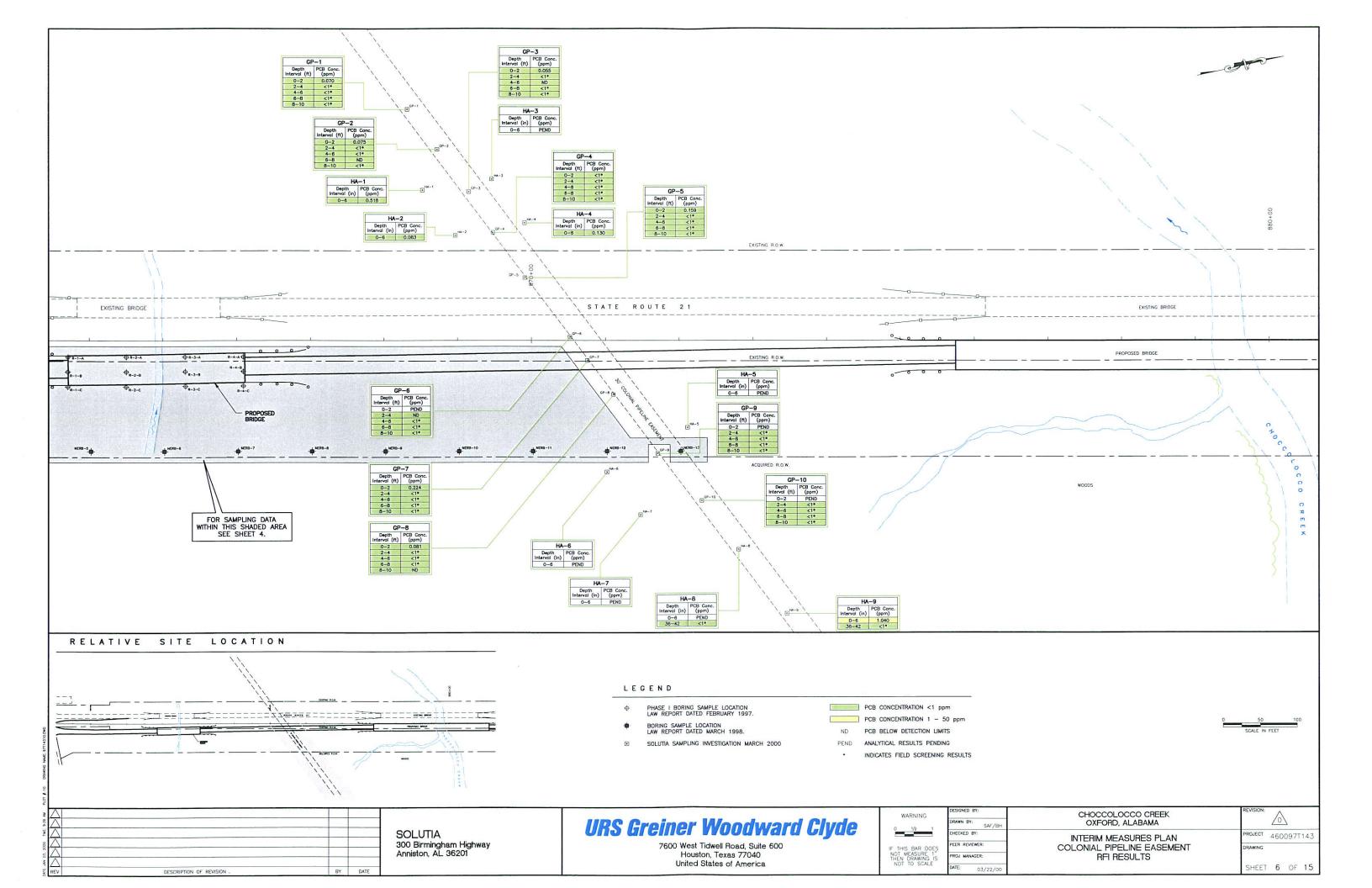
300 Birmingham Highway Anniston, AL 36201

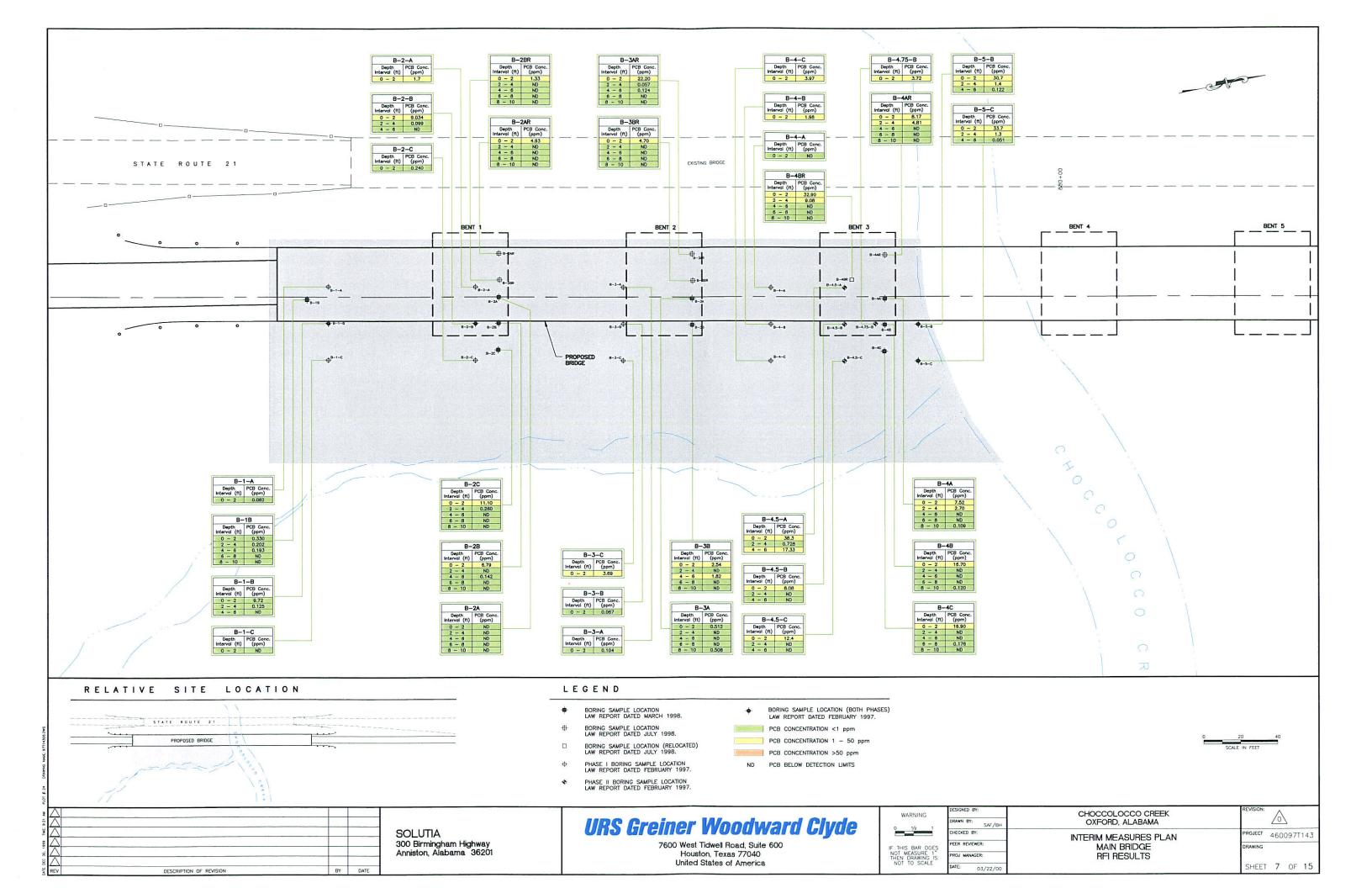


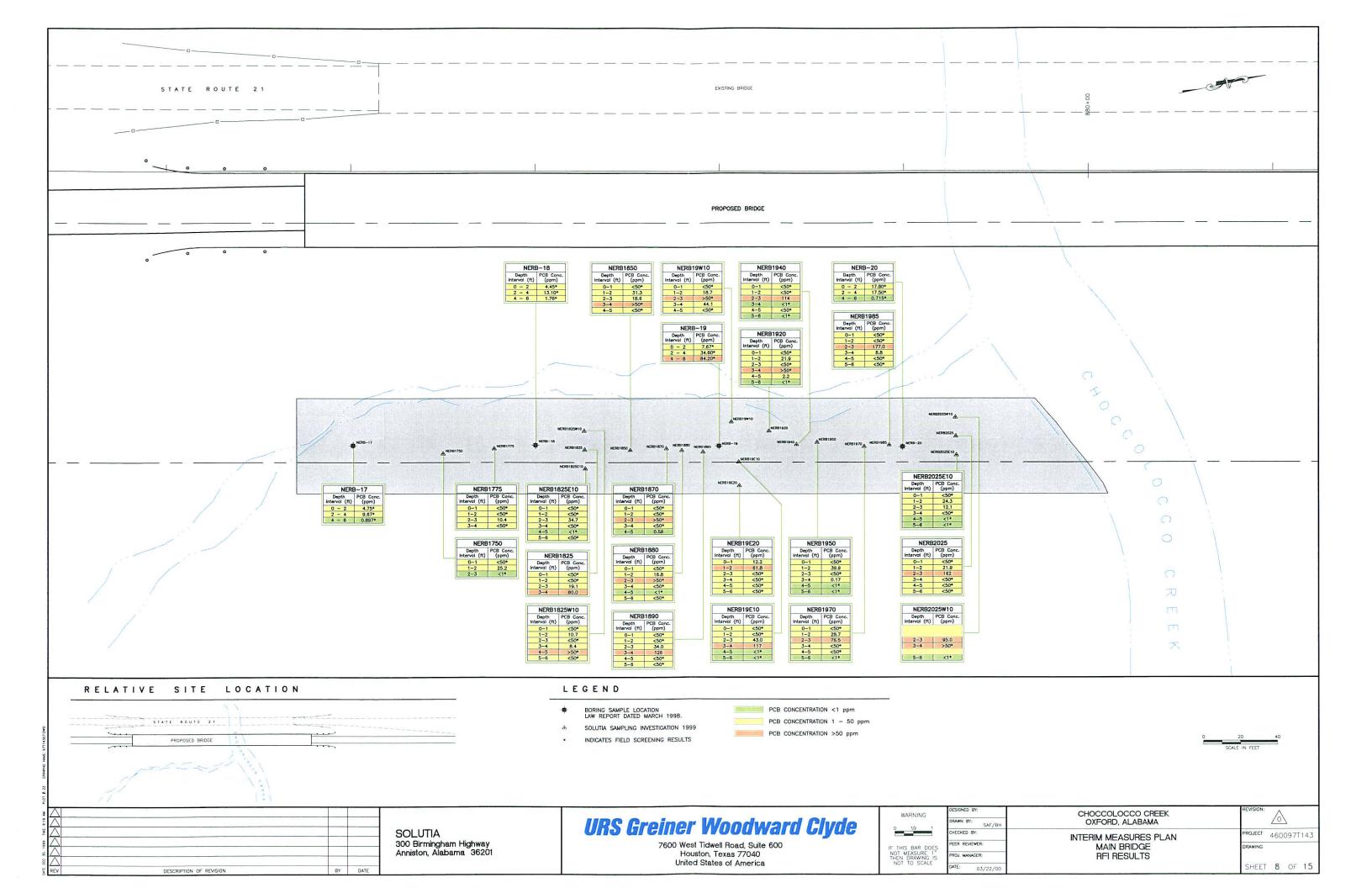


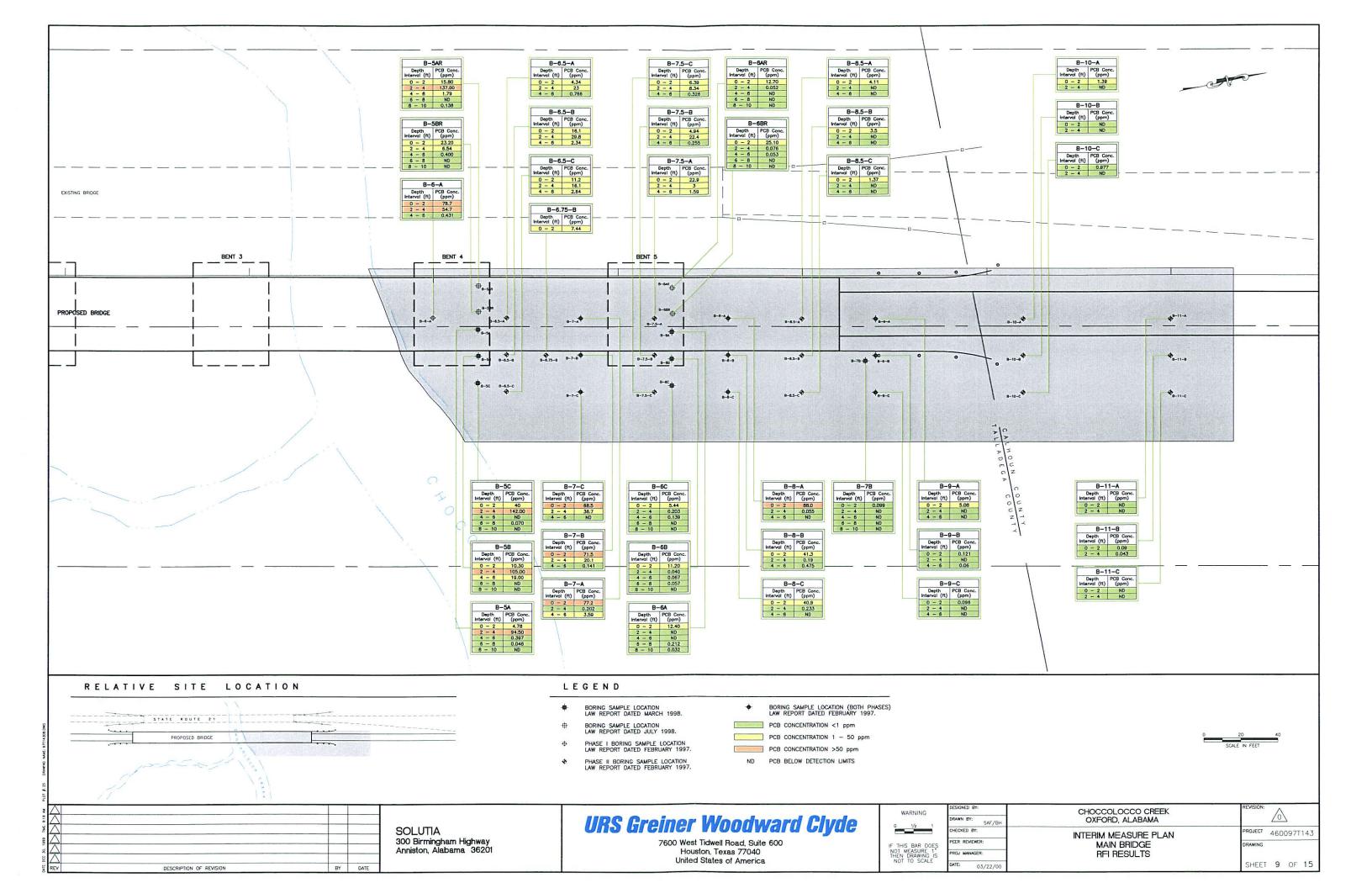


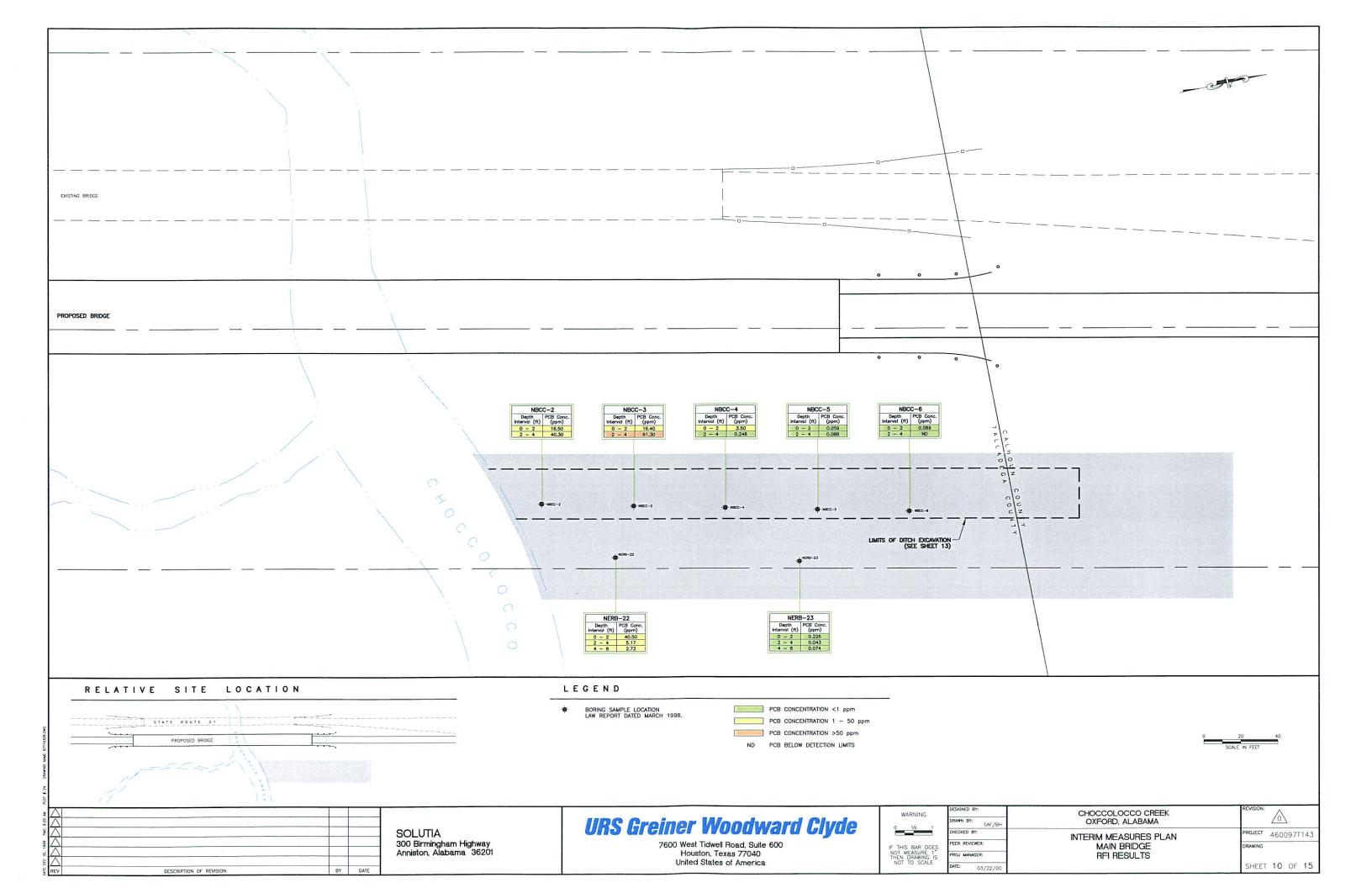














LEGEND

WOODED AREAS TO BE CLEARED (APPROXIMATELY 6.2 ACRES TOTAL) (SEE NOTE 3) $\,$

NOTES

- 1. TREES WILL BE CLEARED WITHIN THE CONSTRUCTION R.O.W. BY CUTTING AT OR NEAR GROUND SURFACE.
- THE TREES WILL BE REDUCED TO CHIPS THAT WILL BE SPREAD OVER AN AREA WITHIN THE R.O.W., BUT OUTSIDE THE PROPOSED ROADWAY EMBANKMENT.
- 3. EXACT EXTENTS REQUIRING CLEARING TO BE FIELD DETERMINED.

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,	DESCRIPTION OF REVISION	RY	DATE	

URS Greiner Woodward Clyde

7600 West Tidwell Road, Suite 600 Houston, Texas 77040 United States of America

DESIGNED BY:	CHOCCOLOCCO CREEK	REVISION:
DRAWN BY: RLR/BH	OXFORD, ALABAMA	207
CHECKED BY:		PROJECT 460097T14
PEER REVIEWER:	INTERIM MEASURES PLAN	DRAWING
PROJ MANAGER:	CLEARING AREA	The sale of the sa
DATE: 07 (00 (00		SHEET 11 OF 1

